

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/009239

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 A61K39/00 C12N15/85 C12N15/861 A61K48/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, Sequence Search, BIOSIS, EMBASE, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 2004/072287 A (ANGELETTI P IST RICHERCHE BIO ; AURISICCHIO LUIGI (IT); CILIBERTO GENN) 26 August 2004 (2004-08-26) the whole document	1-5, 7-29
E	WO 2004/099247 A (ANGELETTI P IST RICHERCHE BIO ; LAHM ARMIN (IT); MENNUNI CARMELO (IT);) 18 November 2004 (2004-11-18) the whole document	1-5, 7-29
Y	WO 03/059379 A (KLYSNER STEEN ; PHARMEXA AS (DK); VOLDORG BJOERN (DK)) 24 July 2003 (2003-07-24) the whole document	1-29

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

16 December 2004

Date of mailing of the international search report

04/01/2005

Name and mailing address of the ISA

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International Application No  
PCT/EP2004/009239

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BERINSTEIN N L: "CARCINOEMBRYONIC ANTIGEN AS A TARGET FOR THERAPEUTIC ANTICANCER VACCINES: A REVIEW" JOURNAL OF CLINICAL ONCOLOGY, GRUNE AND STRATTON, NEW YORK, NY, US, vol. 20, no. 8, 15 April 2002 (2002-04-15), pages 2197-2207, XP008037964 ISSN: 0732-183X the whole document	1-29
Y	HÖRIG H ET AL: "Strategies for cancer therapy using carcinoembryonic antigen vaccines." EXPERT REVIEWS IN MOLECULAR MEDICINE 'ELECTRONIC RESOURCE!'. 19 APR 2000, vol. 2000, 19 April 2000 (2000-04-19), pages 1-24, XP002311014 ISSN: 1462-3994 the whole document	1-29
Y	WO 03/018055 A (MC CLEMENTS WILLIAM L ; CHEN LING (US); HUANG LINGYI (US); MERCK & CO) 6 March 2003 (2003-03-06) the whole document	1-29
Y	ANDRE S ET AL: "INCREASED IMMUNE RESPONSE ELICITED BY DNA VACCINATION WITH A SYNTHETIC GP120 SEQUENCE WITH OPTIMIZED CODON USAGE" JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 72, no. 2, February 1998 (1998-02), pages 1497-1503, XP002073767 ISSN: 0022-538X the whole document	1-29
Y	KIM C H ET AL: "Codon optimization for high-level expression of human erythropoietin (EPO) in mammalian cells" GENE: AN INTERNATIONAL JOURNAL ON GENES AND GENOMES, ELSEVIER SCIENCE PUBLISHERS, BARKING, GB, vol. 199, no. 1-2, 15 October 1997 (1997-10-15), pages 293-301, XP004126394 ISSN: 0378-1119 the whole document	1-29

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International Application No  
PCT/EP2004/009239

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,Y	<p>FACCIABENE ANDREA ET AL: "Baculovirus vectors elicit antigen-specific immune responses in mice"</p> <p>JOURNAL OF VIROLOGY,</p> <p>vol. 78, no. 16, August 2004 (2004-08),</p> <p>pages 8663-8672, XP009041773</p> <p>ISSN: 0022-538X</p> <p>the whole document</p> <p>-----</p>	1-29

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 10-14, and 20-29 are directed to methods of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009239

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2004072287	A	26-08-2004	WO 2004072287 A1	26-08-2004
WO 2004099247	A	18-11-2004	WO 2004099247 A2	18-11-2004
WO 03059379	A	24-07-2003	WO 03059379 A2	24-07-2003
			EP 1467751 A2	20-10-2004
WO 03018055	A	06-03-2003	CA 2457890 A1	06-03-2003
			EP 1427443 A1	16-06-2004
			WO 03018055 A1	06-03-2003